INDEX OF SUBJECTS

allele, 29
  V^{by}, leaf marking, 1
amino-acid determination in *Salmonella* flagellar protein, 456
aneuploidy in yeast, 453
anther, rye, vascular system of, 23
anthranilic acid, 56 *sqq.*
antigen, Lewis, in saliva, 336
ascopore length, in *N. crassa*, 351-361
Aspergillus, cytoplasmic variation in, 377-388
  negative interference in, 247-262
association, bivalent, 51 *sqq.*
assortive mating, 389-396

behaviour and evolution, 330
biochemistry of human genetics, 448

cancer, and genetics, 113
centromere, 47 *sqq.*, 131, 243
chiasma formation, 47 *sqq.*
  frequency, 17, 20, 221 *sqq.*
    and timing, 24
chromatid, 51
chromosome, 193-197
  behaviour, 17-27
  heterobrachial, 52
  number variation, 454
  polytenic salivary gland, 35-45
  replication, 50
  sex, 97-100, 235-240, 431-439
  structure in *P. americana*, 47-54
  supernumerary, 129-138
  telocentric fragment, 241-246
colchicine, 47
conidial production, 56
constrictions, in chromosomes, 47 *sqq.*
cotton chromosomes, 453
cross-breeding, in *Vicia*, 175 *sqq.*
crossing-over, 14, 98 *sqq.*
  induced, 369 *sqq.*
cytological organisation, 451

Darwin, 331, 332, 333
DDT sensitivity, 455
  tolerance in *D. melanogaster*, 65-77
developmental variation, in chromosome behaviour, 17-27
diploidisation of polyploid wheat, 407-429
diplotene-diakinesis, 47
DNA, 50
Drosophila, 32, 33
  melanogaster, 65-77, 87-96, 301-313
  mutagenic sensitivity in, 363-375
  sperm mutagenicity in, 115-128
  virilis, 87-96
  willistoni, 35-45

drug resistance, micro-organisms in, 111
duodenal ulcer, genetic studies in, 337
dyschronisation, 20

E.C.G. and congenital deafness, 454
E. coli, fertility in, 456
epidemics, mathematics of, 112
epistacy, 153-159
erythroblastosis, 337
evolution and Marxian biology, 329

fertility, cross-, in *Vicia*, 161-173
  self-, in *Vicia*, 161-173
formylkynurenine synthesis, 87 *sqq.*
fowl, sex chromosome of, 97-110

Gamma radiation, effects of, 1-15
  dose-fractionation, 6
gene frequency, 140 *sqq.*
genes, new, progress of, 283-299
genetics, and cancer, 113
genetics, human biochemical, 112
Gramineæ, 193-197
gyandroids, 29
gyandromorphs, 29 *sqq.*

Habrobracon, 29-34
hatchability, 32 *sqq.*
Hayman's device, 155 *sqq.*
Helix, 129-138
heterocaryons, 57 *sqq.*, 201, 209 *sqq.*
heterosis and complex characters, 327-328
  and quantitative inheritance, 324-327
human chromosome nomenclature, 451
human intersexes, 337
hybridisation, interracial, 35-45

imprinting, theory of, 79-85
inbreeding, as a result of imprinting, 79-85
indole, metabolism, 55
inheritance, quantitative, 153-159
interchange rings, 48
interference, negative, in *Aspergillus*, 247-262
VIth International Bloodgroup Congress, 452
intersexes, haploid, 29-34
inversions, 35 *sqq.*

Klinefelter's syndrome, 235 *sqq.*

lethals, 31, 117 *sqq.*, 364 *sqq.*
linkage, 97-110
  distribution, 153-159
loci, in fowl sex chromosome, 97-110
  methionine, 199-205

locus, ebony, 301-313
modifier, 32 *sqq.*
orange, 30
vermilion, 87 *sqq.*
Lolium, species differentiation in, 219-233

mating, assortive in Arctic skua, 84 *sqq.*
meiosis, 21 *sqq.*, 47 *sqq.*
melanin inhibitors, 301-313
metaphase index, 21
methionine loci, 199-205
methionine-2 alleles, complementation and recombination, 207-217
microbial genetics, 446
mitosis, 47 *sqq.*, 130 *sqq.*
Mormoniella, 33
morphological variants, 380 *sqq.*
mouse, " adipose," 335
mutagenic sensitivity, 363-375
mutability, effect of genotype on, 11
mutagenicity, 115-128
mutants, trytophan, 55-64
mutations, 97-110, 457
induced, 1-15
recoverable, 11

negative interference in *Aspergillus*, 456
Neurospora crassa, 55-64, 351 *sqq.*
methionine loci in, 199-205
methionine-2 alleles in, 207-217
nitrogen mustards, effect on mutagenicity, 115-128
nuclear exchange, in dikaryons, 397-405

Panaxia, 139-151
Papaver hybrids, dormancy in, 315-320
penetrance and recombination values, 263-282
Periplaneta americana, 47-54
pollen tube growth, in *Vicia*, 185 *sqq.*
polygenes, segregation of, 351-361
polymorphism, chromosomal, 39, 134
in *Panaxia*, 139-151
population genetics, 449
poxyviruses, heredity of, 337
precocity theory, 25
pre-metaphase stretch, 51
prototrophs, 207 *sqq.*
pseudoallele, 89 *sqq.*
pseudoxanthoma elasticum, 335

race genetics, 333
radio-sensitivity, 11
recombination, 403 *sqq.*
fractions, in *Aspergillus*, 249 *sqq.*
genetic, in *S. typhimurium*, 455
values, 263-282.
Reith Lectures, 441
resistance, genetic basis of, 72 *sqq.*
ring multiple, 49
rye anthers, 17-27
pollen mother cell, 17-27

Salmonella typhimurium, *su-leu A* locus in, 339-350
scute, 38
seed-dormancy, inheritance in *Papaver* hybrids, 315-320
seed-setting, in *Vicia*, 161 *sqq.*
segregation, nucleolar controlled, 431-439
preferential, 241 *sqq.*
selection, disruptive, 335
in *Lolium*, 453
and pre-adaptation, 65-77
selfing systems, 157
in *Vicia*, 166 *sqq.*
sex determination, locus for, 29 *sqq.*
sib-selection, in *D. melanogaster*, 68 *sqq.*
species differentiation in *Lolium*, 219-233
stercorarius parasiticus, 79-85
suppressors, 347
of *vermilion*, 90

telocentric chromosomes, 241-246
thyroid, 113
transductions in *S. typhimurium*, 340 *sqq.*
Trifolium repens, 1-15
Trillium, fragment chromosomes in, 241-246
Trimerotropis citrina, 49
tripping, in *Vicia*, 161 *sqq.*, 182 *sqq.*
tryptophan, genetics of synthesis, 55-64
mutants, 55-64
pyrrolase, 87-96
Turner's syndrome, 235 *sqq.*

variation, cytoplasmic, 377-388
developmental, 17-27
in fowl, 454
Vicia, breeding, 175-191
fertility, 161-173
self fertility, 182 *sqq.*

wheat, polyploid, diploidisation of, 407-429

xanthommatin, 92
xasta condition in *D. melanogaster*, 457

INDEX OF AUTHORS

Ahmad, M., 55-64
Alder, H. L., 263-282
Allard, R. W., 263-282
Ambler, R. P., 456
Arlett, C. F., 377-388

Baglioni, Corrado, 87-96
Bailey, N. T. A., 112
Bateman, A. J., 363-375
Batt, R. A. L., 335
Bedson, H. S., 337
Bell, P. R., 331
Bennett, Jack, 65-77
Berlyne, G. M., 335
Bodmer, W. F., 283-299
Bond, D. A., 175-192
Borstel, R. C. von, 29-34

Catcheside, D. G., 55-64
Chandley, A. C., 363-375
Clarke, C. A., 335
Clowes, R. C., 456
Cock, A. G., 454
Cooper, J. P., 453
Cordiero, A. R., 35-45
Cox, B. S., 453
Crowe, Leslie K., 397-405

Davies, D. Roy, 1-15
Dawson, G. W. P., 339-350
Day, P. R., 457
Dumbell, K. R., 337

Elliott, Charles G., 247-262
Evans, D. A. Price, 337
Evans, H. J., 129-138

Fahmy, Myrtle J., 115-128
Fahmy, O. G., 115-128
Finn, Ronald, 337
Fox-Hulme, P., 337
Francis, H. H., 337
Fraser, G. R., 454
Froggatt, P., 454

Garn, S. M., *editor*, 333
Godward, M. B. E., 193-197

Harper, John L., 315-320
Harris, H., 112
Harrison, G. A., 335
Haskell, G., 454
Hayes, J. D., 455
Hayes, W., 456
Hayman, B. I., 324-327
Hayward, M. D., 235-240
Holden, J. H. W., 175-192
Howarth, S., 455
Hutt, F. B., 97-110

John, B., 47-54 ; 431-439
Jones, R. Morley, 153-159

Kimber, G., 453
Kroman, R. A., 301-314

Lee, T. O., 351-361
Le Roy, H. L., 449
Lewis, K. R., 47-54 ; 431-439

Maccacaro, G. A., 456
McConnell, R. B., 336
McDonough, M. W., 456
McNaughton, I. H., 315-320
Marques, V. B., 35-45
Medawar, P. B., 441
Morse, Peckham, *editor*, 332
Murray, Noreen E., 199-206, 207-217

Naylor, Beryl, 17-27; 219-233

O'Connor, Cecilia M., *editor*, 111; 448
O'Donald, P., 79-85; 389-396
Ozeki, H., 455

Parsons, P. A., 283-299; 301-314
Pateman, J. A., 351-361
Peat, W. E., 457
Picken, L. E. R., 451
Platt, Robert, 335

Rees, H., 17-27
Riley, Ralph, 407-429
Roe, Anne, 330
Rowlands, D. G., 161-173
Rutishauser, A., 241-246

Salzano, F. M., 35-45
Sheppard, P. M., 335
Simpson, G. G., 330
Singh, D. N., 193-197
Smith, P. A., 29-34
Smith, S. M., 455
Smith-Keary, P. F., 339-350
Stocker, B. A. D., 455; 456

Tun, N. N., 454

Veen, J. H. van der, 321-323

Wall, E. T., 1-15
Whittington, W. J., 457
Williams, Watkin, 327-328
Williamson, M. H., 139-151
Wolstenholme, G. E. W., *editor*, 111; 448

Zamendorf, Stephen, 333
Zirkle, Conway, 329